August 12, 2010

Philip Giudice, Commissioner
Massachusetts Department of Energy Resources
100 Cambridge Street, 10th Floor
Boston, MA 02114

Dear Commissioner Giudice:

The New England Clean Energy Council ("NECEC" or the "Council") appreciates the opportunity to provide these comments in connection with the Department of Energy Resources' ("Department") announcement of its intent to revise the Renewable Portfolio Standard Regulations as they pertain to "low emission advanced biomass power conversion technologies."[1]

The Council's mission is to accelerate the region's clean energy economy to global leadership. Integral to that mission is the promotion of renewable power project development. The Council represents over 175 members, including clean energy companies, project developers, venture investors, financial and educational institutions, industry associations, utilities, labor representatives, and commercial consumers. Its ranks include sixty clean energy CEOs, representatives from most of the region's major law firms, and partners from over a dozen of the region's top venture capital firms (with a total of over $8 billion under management).

Sustainable biomass power generation is a renewable energy resource that can supply baseload power to New England's power supply portfolio. Although the region is increasing its utilization of efficiency and renewable energy to meet electricity needs, fossil fuels account for approximately 60 percent of regional electricity consumption. When the region fails to utilize any available zero- or low-carbon renewable energy source, it perpetuates over-dependence on fossil fuels that exacerbate the impacts of climate change.

The New England Clean Energy Council believes our region has no low-carbon resource to spare – that it needs to deploy, on a sustainable basis, all conservation, efficiency, and clean energy resources at its disposal, without delay. Clean wood biomass power generating units relying on sustainably harvested fuel can have net lifecycle carbon emissions that are dramatically lower than fossil fuel resources. Sustainable biomass power generation therefore can and should play an important role as part of a diverse mix of renewable energy resources.

The Council believes that biomass power conversion technologies and sources of fuel, when selected, designed and operated in a sustainable manner, can play an important role in the Commonwealth's Renewable Portfolio Standard. To that end, the NECEC is providing the following comments for consideration by the Department as it revises its Renewable Portfolio Standard regulations for biomass qualification in accordance with the letter dated July 7, 2010 from Secretary Bowles to Commissioner Giudice.

[1] Letter from Ian A. Bowles to Philip Giudice, July 7, 2010

Full Lifecycle Greenhouse Gas Accounting

To qualify for the RPS, wood biomass facilities must use fuel whose net lifecycle carbon emissions approach zero – in particular, forest harvesting residues whose decay would release carbon in any event, or fuel from forests managed sustainably so that accelerated growth will increase the rate of carbon absorption. In setting RPS regulatory standards for measuring the GHG impacts of biomass power generation, DOER should use the best available science[2] to determine full lifecycle GHG impacts and should recognize that the type of biomass source material matters greatly. Climate benefits may result from sustainably managed and harvested biomass. However, fuel obtained from forest clearing or other unsustainable harvesting carried out solely to supply biomass power plants may have adverse climate impacts, particularly if harvesting results in lasting land-use changes or if fuel is harvested in remote locations requiring transportation that produces significant carbon emissions.

Sustainable Forest Management

Forests where biomass fuel is harvested must be managed sustainably, pursuant to verifiable standards and practices, in order to protect not only their carbon sequestration function but also key natural resources and biodiversity. Wood biomass power plant operators must adopt sustainable forest management standards and verification methods for their fuel sources. Existing forest management regulations should be supplemented to require and verify that biomass fuel originates from sustainably managed forests. Biomass energy development can thereby serve as a catalyst to draw additional forest acreage into sustainable management practices. The cost of ensuring that fuel comes from sustainably managed forests should be treated as a cost of doing business for biomass power plant operators.

To develop workable and enforceable forest sustainability standards for RPS qualification, DOER should examine the current practices of the Department of Conservation and Recreation ("DCR") under Chapter 132 of the Massachusetts General Laws (including the filing and oversight related to Forest Cutting Plans), recognizing that biomass harvesting for power supply may require additional protections to ensure climate benefit and ecosystem health (e.g. residue retention, soil conditions, biodiversity, water quality, etc.). To the extent that DOER concludes that additional protections are needed, the Council believes that DOER should strive to avoid duplication of efforts among sister agencies and favor inter-agency collaboration, building on existing DCR expertise. Any new sustainability standards should be based in science and allow flexibility based on site conditions. The study produced by the Forest Guild as part of the Manomet study may serve as a useful guide for the development of such standards.[3]

Any definition of "waste wood" promulgated by the Department must be consistent with its sustainability standards. Limits on the quantity of forest residues that may be considered "waste wood" should be applied strictly to harvests conducted for the purpose of short-term income generation. Non-saw timber material resulting from harvests conducted for the purpose of long-term forest management and approved by a licensed forester in accordance with sustainable, site-specific, forest management practices should be eligible for more extensive treatment as "waste wood". In addition, the Department should determine which categories of biomass material whose generation is not currently regulated under Ch. 132 (primarily non-forest sources), should be eligible for treatment as "waste wood."

[2] This includes, but should not be limited to, the recently completed Manomet Center-led biomass study.

[3] "Forest Biomass Retention and Harvesting Guidelines for the Northeast", Forest Guild Biomass Working Group, May 2010

It is also critical that DOER set consistent RPS regulations for all eligible facilities, whether these facilities are in the Commonwealth or not. Consistency is needed to ensure an even playing field and robust market competition for Renewable Energy Certificates, and the Council urges the Department to ensure that the sustainable forest practices required for RPS eligibility are consistent (and consistently applied) to all facilities and biomass-producing harvests.

Maximizing Plant Efficiency

As indicated in the July 7, 2010 letter from Secretary Bowles, the Council agrees that RPS-eligible facilities must be "designed, constructed and operated to achieve maximum practicable efficiency".[4] In setting these efficiency standards, DOER should evaluate each potentially eligible biomass technology type (e.g., electric power generation, combined heat and power, etc.) and determine appropriate efficiency thresholds that ensure that qualifying facilities will employ "low emission advanced power conversion technologies." The Council does not believe that a single efficiency threshold is appropriate for all biomass technologies; rather, we urge DOER to set applicable technology thresholds that ensure efficient use of our biomass resources, but do not exclude non-CHP resources altogether. Moreover, as contemplated in the RPS statutory language, DOER should set these efficiency regulations in a manner that allows for new, advanced biomass technologies, upon a showing of qualification, to become eligible for the RPS.

Compliance with All Air Pollution Standards

To be eligible for the RPS, new biomass power generation facilities must meet state and federal air emissions standards and limitations. Biomass power generation facilities can emit criteria pollutants such as particulate matter and nitrogen oxides at lower levels than coal- and oil-fired electricity generation, and should limit emissions to such lower levels by using the best available control technologies. Those facilities seeking qualification as a renewable resource under an RPS must meet any applicable criteria for being "low-emission." If clean, sustainable biomass energy facilities displace coal- and oil-fired electricity generation, they can play an important role in improving air quality.

The Council believes that sustainable biomass power generation facilities can be developed as an important tool in achieving the Commonwealth's renewable energy and climate goals. Biomass energy can help diversify the New England power supply system and limit the region's heavy reliance on fossil fuels. Unlike some other renewable energy sources, biomass is capable of providing baseload power. The Council believes that sustainably harvested, low emission, advanced biomass power conversion technologies can continue to play a significant role in achieving the Commonwealth's RPS targets. We appreciate the opportunity to provide these comments and look forward to continued engagement in these important issues.

Sincerely,

Peter Rothstein, President
New England Clean Energy Council

[4] Letter from Ian A. Bowles to Philip Giudice, July 7, 2010 at 1.